



Missions for
America
Semper vigilans!
Semper volans!

The Coastwatcher

Publication of the Thames River Composite Squadron
Connecticut Wing
Civil Air Patrol

300 Tower Rd., Groton, CT
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LtCol Stephen Rocketto, Editor
srocketto@aquilasys.com

C/MSgt Virginia Poe, Reporter
C/SrA Michael Hollingsworth, Printer's Devil
Lt David Meers & Maj Roy Bourque, Papparazis

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SCHEDULE OF COMING EVENT

17-19 OCT-CTWG/NER Conference
16-18 OCT-NER AEO Course at Conference
21 OCT-TRCS Meeting
18-25 OCT-NER Staff College-New Jersey
28 OCT-TRCS Meeting

01 NOV-CTWG SAREX
04 NOV-TRCS Meeting-**Fruit Sale Ends**
08-09 NOV-SLS Course-Meriden
11 NOV-TRCS Meeting
18 NOV-TRCS Meeting
25 NOV-TRCS Meeting

16 DEC-TRCS Annual Holiday Party

ANNUAL CITRUS FRUIT FUNDRAISER



CITRUS FRUIT FUND RAISER

The first week of the fundraiser is now over and Maj Lintelmann awaits the turn of early receipts.

Cadet, Parents, and Senior Members are reminded that the final date for turning in money is Tuesday, 04 November. Only three weeks are left to solicit orders. Do not wait. Act now.



CADET MEETING NOTES

14 October, 2014

by

C/MSgt Virginia Poe

Drill was held on the airport parking lot.

C/SSgt Sean O'Toole presented a safety briefing.

C/CMSgt Matthew Johnstone delivered the required oral presentation for the Armstrong Award. The title was "The Importance of Aerospace in Terms of National Defense."

LtCol Rocketto reported on the current status of the Citrus Fruit Fundraiser.

A promotion ceremony was held. Cadet Poe advanced to C/MSgt.

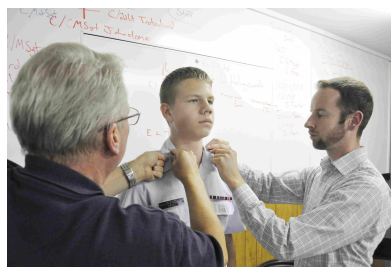
Cadets Daniel and Michael Hollingsworth were both promoted to the grade of C/TSgt and Michael was awarded his Expert Class rifle medal.

Matthew Drost received the Mary Feik Award and his C/SrA stripes.

C/A1C stripes were earned by Cadet Aubrey Crandall.



Mrs. Poe and DSC Maj Farley pin Cadet Poe's new insignia.



Mr. Miljenovic, Cadet Drost's mentor, and Maj Farley attach C/SrA insignia to Cadet Drost's Collar.

Cadet Crandall receives her C/A1C stripes.



SENIOR MEETING NOTES

*14 October, 2014
Commander's Call*

No formal training was held. Officers worked on individual projects.

QUALITY CADET UNIT AWARD

The Squadron has earned the Quality Cadet Unit Award for 2014 and joins eight other CTWG squadrons and 290 squadrons nationally which qualified for this honor.

The criteria for the award are quantitative: three Training Leaders of Cadets graduates, the achievement of the Aerospace Excellence Award and percentage participations in orientation flights and encampment. Cadet achievement, unit growth, and retention are counted also.

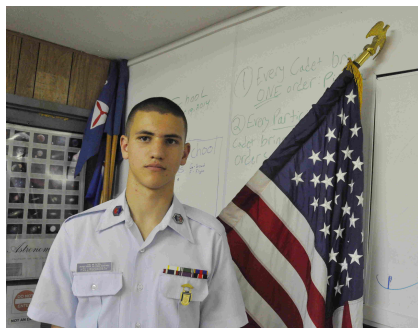
RECRUITING



Cadet Recruiting Ribbon



Cadet Daniel Poe reports for promotion.



Cadet Michael Poe with new stripes and an Expert Medal.

Squadron quality and strength requires a robust recruiting program. Cadets are eligible for a recruiting ribbon by enlisting new members. Seniors must convince a total of seven individuals to join.



*They are
never too
young for a
sales pitch.
Andrew
Carpenter
considers
enlistment
in 12 years.*



Senior Recruiting Ribbon

SQUADRON MAINTENANCE DAY

11 October, 2014

Submitted by

George W, DeLong, Lt. Cmdr., USN

Six Squadron officers met on Saturday to work on necessary maintenance on the trailers. Rain forced a late start and prevented painting.

Plastic sheeting was installed on the windows to provide insulation during the winter. The outside light fixture was replaced. Rain prevented painting the steps and railings.

Future work includes the painting, replacement of a window in the Cadet trailer, installing door insulation, and repairing a leak in the roof of the supply trailer.

LtCols, deAndrade and Doucette, Maj's Noniewicz, Bourque, Farley, and Bourque, and Lt Meers all contributed time on Saturday.

AEROSPACE CURRENT EVENTS

What's In a Name?

By

Stephen M. Rocketto

Words ~~are~~ the primary components of language. For technical communications, words must be specific about what they mean. Poets and politicians have different constraints imposed by their art or their purpose:

Three Europeans were arguing about which of their languages is the most mellifluous. The Frenchman suggested as an example, *pappilon*, French for butterfly. The Spaniard countered with *mariposa*. To which the German retorted, "und vat ist wrong mit *schmetterling*."

The above anecdote brings to mind the feverish activity in the aero industry to come up with an acceptable name for what is commonly called a "drone." The term "drone" is commonly used to refer to a remotely piloted or autonomous unmanned aerial vehicle (UAV), and is causing the industry which produces these aircraft some discomfort. Drone denotes the male honey bee. It is stingless, does no work, and produces no honey. Their only purpose is to mate with the queen. Consequently, the term drone is considered uncomplimentary when applied to humans or unmanned aerial vehicles since it connotes a freeloader with limited abilities.

Ironically, one of the first of the drone aircraft was the radio-controlled DeHavilland DH.82 “Queen Bee”, a modified Tiger Moth ~~which and~~ used as a target for anti-aircraft guns.

The aero industry trade group which produces these flying objects prefers Unmanned Aircraft Systems (UAS) since the vehicles require ground based equipment programmed or operated by humans. As might be expected, the U.S. Air Force (USAF) prefers Remotely Piloted Aircraft (RPA) which emphasizes the role of having a human in control. And, as might be expected, the U.S. Navy (USN) disagrees with the USAF and uses the term Unmanned Aerial Vehicle (UAV). The U.S. Coast Guard differs from her seagoing sister and the trade organization and prefers UAS. The U.S. Army and Marine Corps just calls them drones. Officially, the Federal Aviation Administration (FAA) and the U.S. Congress agree with the Coast Guard and uses UAS in legislation and rule making.

So use RPA if you want to communicate with a Zoomie, UAV if gabbing with a Gob, and UAS if you need to brace a Coastie or someone from the FAA. When jabbering with a Jarhead or Grunt, Drone will suffice. If you travel to Europe and speak one of the dozens of language on the continent just translate “Remotely Piloted Aviation Systems” (RPAS). The British do not consider themselves European, nor do the Europeans, so if you should chin-wag with a paper wallah from the UK Civil Aviation Authority or banter with an RAF pilot, pick a U.S. acronym and take a chance.

Much ink has been spilled over the issue of the meaning of words. Plato, in a dialogue titled *Cratylus* presented two positions which can be taken: conventionalism and naturalism. Conventionalism argues that meaning is determined by public usage. Naturalism reasons that a name is not arbitrary but, is in some ways, natural to the object it represents, the word contains the essential elements of its referent.

Let us now turn to the Bard of Stratford-on-Avon for a final opinion which we can find in *Romeo and Juliet*, a play about star-crossed lovers from two feuding families. Juliet expresses her opinion on the meaning of names.

*'Tis but thy name that is my enemy;
Thou art thyself, though not a Montague.
What's Montague? it is nor hand, nor foot,
Nor arm, nor face, nor any other part
Belonging to a man. O, be some other name!
What's in a name? That which we call a rose
By any other name would smell as sweet;
So Romeo would, were he not Romeo call'd,
Retain that dear perfection which he owes
Without that title. Romeo, doff thy name,
And for that name which is no part of thee
Take all myself.*

The assignment of a name and agreement on its usage is important for clear communications but parochial interests can make the language a morass of ambiguity and vagueness.

But I have droned on too long on this interesting but esoteric topic.

AEROSPACE HISTORY

The X Planes Part III

The first two installments of this feature discussed the manned X Planes from the Bell X-1 to the Northrop X-21. This week's installment discusses the Bell X-22, the Martin X-24, and the Bensen X-25. Missing numbers are either unmanned aircraft or planned vehicles which were never constructed.

Bell X-22A

During the late '50s and into the '60s, military interest in vertical take-off and landing (VTOL) led to an examination of concepts which achieved VTOL but were not helicopters. A “Tri-Service”

plan was formulated in which the Army, Navy, and Air Force would study the development of VTOL. The Air Force and Army both dropped out of the program. The Air Force wanted more range than any feasible VTOL aircraft could provide. The Army chose to develop a large lift helicopter. But the Navy and the Marine Corps, who were seeking a replacement for their HR2S helicopter which is better known as the Army's CH-47 Mojave, Sikorsky's Model 56.

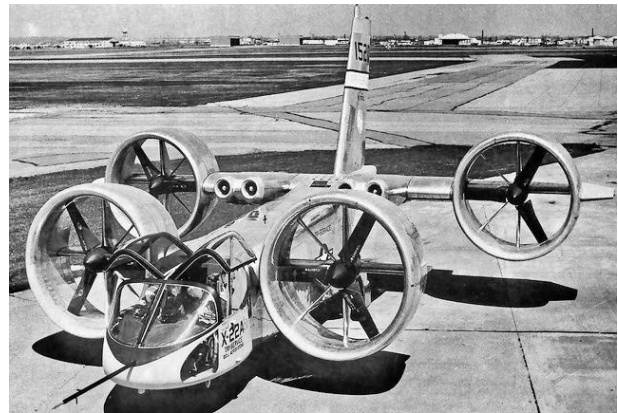
Contemporaries of the X-22 were the Vought-Hiller-Ryan XC-142A and the Curtiss X-19A. The XC-142A utilized rotating wings to which the engines were attached. The Curtiss X-19A had fixed wings but rotated the engines.

Bell's X-22 was unique in that it utilized four ducted propellers. Two were mounted on the forward fuselage and two on a wing placed at the tail of the aircraft. The position of the ducts and controlled the direction of thrust.



*X-22 in transition phase of flight
(Credit: NASA Langley)*

Cornell Aeronautical Laboratory (CAL) joined in a provided stability enhanced controls and instrumentation. Eventually, the Navy transferred the X-22 to CAL which continued to use it for studies. The heads-up display for the Harrier was one of the products. Of two built, one survives and is on display at the Niagara Aerospace Museum.



*X-22A on the ramp with its engines horizontal.
(Credit: Public Domain)*

Martin X-24

Lifting bodies became a subject of intense investigation by NASA and the USAF during the 1960's and 1970's. A lifting body is an aircraft that derives its lift from the configuration of its body rather than from wings. The research was aimed at developing a manned spacecraft which could survive an unpowered reentry.

Old timers will remember the TV series, *The Six Million Dollar Man*. The opening title featured an actual film of a lifting body crashing, the Northrop M2-F2.

After glide tests, the X-24A was powered by an XLR-11 engine as used in Bell's X-1 and exceeded 1,000 mph and 71,000 ft.



The X-24A on display at the Museum of the USAF was originally the jet-powered Martin SV-5J, a derivative of the X-24A built for flight training. It was never flown. For display, the SV-5J has been converted to simulate the X-24A.

The bulbous X-24A was then converted into the more streamlined X-24B. This modified aircraft flew a number of glide tests and powered flights and proved more stable than the X-24A paving the way for the Space Shuttle program.



The X-24B resembled a flat iron.

Bensen X-25A Gyrocopter

The Bensen Aircraft Corporation was a North Carolina company which specialized in helicopters and autogyros. The founder, a Russian immigrant named Igor Bensen. For a time he worked for Connecticut's Kaman Aircraft before striking out on his own. In 1968, the USAF was studying ways to improve the chances of a flyer who bailed out to avoid capture. The X-25A was an ingenious answer. Bensen modified one of his popular B-8M gyrocopters to become what was termed a "Discretionary Descent Vehicle. (DDV)" The original version X-25 was an unpowered gyrocopter.

After ejection, the rotor blades unfolded and the pilot had a modicum of control and could steer himself to an area in which he had less chance of being captured.

The X-25A used a McCulloch 90 hP engine and has a range of 90 miles! This feature would allow the pilot more latitude in flying to a safe haven.



A Bensen Gyrocopter on display at the Museum of the USAF.

The end of the Vietnam War and improvements in technology led to the abandonment of the idea of a DDV. However, Bensen's company over a thirty year period sold gyrocopters as kits and they were remarkably popular. Bensen set a record for gyrocopter production.



A pilot hand props a Benson B-8 prior to flight at the long gone but still loved Waterford Airport.

However, their designs were never updated and other companies entered the market bringing about the demise of Bensen Aircraft.

The founder of the company, Igor Benson, like Igor Sikorsky, was a Russian immigrant. He held both a Bachelor of Science degree in Mechanical Engineering from Hoboken's Stevens Institute of Technology and a Doctor of Divinity from Indiana University.